

Title (en)
MULTILAYERED MULTIFUNCTIONAL HEAT-MANAGEMENT MATERIAL

Title (de)
MEHRSCHICHTIGES MULTIFUNKTIONALES WÄRMESPEICHERMATERIAL

Title (fr)
MATÉRIAU MULTICOUCHE MULTIFONCTIONNEL DE GESTION DE LA CHALEUR

Publication
EP 4045706 A4 20231025 (EN)

Application
EP 20877979 A 20201013

Priority
• US 201962916097 P 20191016
• US 2020055382 W 20201013

Abstract (en)
[origin: US2021112895A1] A heat-management material that includes a base fabric having an externally facing surface and an internally facing surface; and a plurality of multilayered multifunctional heat-management elements coupled to the externally facing surface of the base material wherein the heat-management material has weighted average thermal emittance of less than 0.8 (or 80%). The multilayered multifunctional heat-management elements include a low thermal emittance layer and a high solar absorptance layer.

IPC 8 full level
D06M 11/83 (2006.01); **A41D 31/06** (2019.01)

CPC (source: EP KR US)
A41D 31/02 (2013.01 - US); **A41D 31/04** (2019.01 - US); **A41D 31/065** (2019.01 - EP KR); **B32B 5/02** (2013.01 - KR US); **B32B 7/027** (2018.12 - KR); **B32B 15/14** (2013.01 - KR US); **B32B 2255/02** (2013.01 - KR US); **B32B 2255/26** (2013.01 - KR US); **B32B 2307/30** (2013.01 - KR US); **B32B 2307/4026** (2013.01 - KR US); **B32B 2437/00** (2013.01 - KR); **B32B 2437/02** (2013.01 - US); **B32B 2437/04** (2013.01 - US)

Citation (search report)
• [I] US 2013212789 A1 20130822 - CONOLLY BRIAN JOHN [AU], et al
• [A] US 2003054141 A1 20030320 - WORLEY JAMES BRICE [US], et al
• [A] CN 105459476 A 20160406 - ZHOU HEXING
• See references of WO 2021076494A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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US 2021112895 A1 20210422; AR 120250 A1 20220209; CA 3157938 A1 20210422; CL 2022000899 A1 20230224; CN 114746602 A 20220712; CN 114746602 B 20240130; EP 4045706 A1 20220824; EP 4045706 A4 20231025; JP 2022552313 A 20221215; KR 20220079889 A 20220614; TW 202120660 A 20210601; TW I788713 B 20230101; WO 2021076494 A1 20210422

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